# The Central New Yorker ASHRAE Newsletter

The CNY Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers

### **Chapter Officers**

President – Mark Rabbia Ph: 432-6029 Email: mark.r.rabbia@carrier.utc.com

President Elect – Chris Martin Ph: 463-4526 Email: chrismartin@carrier.utc.com

Vice President – Jim Walker Ph: 471-0105 Email: jwalker@rfpeck.com

Secretary – Steven Sill Ph: 754-8001 x: 3950 Email: csill@buweiser.com

Treasurer – Rae Butler Ph: 492-2445 Email: rbutler3@twcny.rr.com

Historian – Paul Britton Ph: 446-4587 Email: pbritton51@verizon.net

Past President – Tom Buswell Ph: 464-7371 Email: tom.buswell@carrier.utc.com

Research Promotion – Paul Conte Ph: 487-8791 Email: pconte@proairplus.com

Membership Promotion – John Tacklyn Ph: 432-6749 Email: John.Tacklyn@carrier.utc.com

Homepage Editor – Tom Buswell Ph: 432-6510 Email: tom.buswell@carrier.utc.com

Newsletter – Heidi Youker Ph: 569-3842 Email: intheworks@verizon.net



# The President's Message

The January meeting was a great turn-out for an exciting topic. School construction is a hot topic in our community right now and Julian deBullet from McQuay International gave a great overview on School HVAC. He was our first ASHRAE Distinguished Lecturer in a number of years and the turn-out was fantastic as nearly 40 people attended. As many of you found out, Julian is a tremendous presenter and did a fabulous job covering a broad range of material in his allotted time. I'm sure we could have listened to him talk all night long. My thanks go out to Julian for making time in his schedule to talk to our chapter.

I continue to see new faces at meeting which is exactly what we hope for. I appreciate all of the new folks showing up in addition to some of you veterans who are reengaging in ASHRAE. Jim Walker, our programs chair (with some help from Bill Walter), has put together a great line up of meetings over the next four months. Look to Jim Walker's program schedule in this newsletter to see the programs we have in store for you. I won't spoil the surprise, but we have another ASHRAE Distinguished Lecturer coming up in addition to an offsite meeting at a local hotspot to tour the HVAC equipment.

February is a month I'm looking forward to. Scott Reynolds from M/E Engineering will share with us some of the work he has been doing in the area of computational fluid dynamics (CFD) in the upstate New York area. Scott has modeled some interesting applications and give us an overview of the types of information we can learn using CFD. Most importantly, Scott's talk will be worth (1) professional development hour, so be sure to attend.

As always, the meeting will be at the Doubletree and cash bar will open at 5:30 p.m., followed by dinner at 6:00 p.m. and presentation at 6:45 p.m. Dinner charge is \$25. Please be sure to register by Friday January 4th using the link below:

> Best Regards, Mark Rabbia CNY Chapter President

http://centralnewyork.ashraechapters.org/Reserv.htm

### http://centralnewyork.ashraechapters.org/

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Central New York Chapter Past President Joe Gardner, 83, of Chittenango, NY, passed away in Syracuse on December 28, 2007. He was born in

Joseph Gardner

Floral Park, NY and graduated from Clarkson College in 1948 with a BSME degree. His college years were interrupted by WWII during which he was a B-17 pilot for an Air-Sea Rescue

Team. After graduation he worked for the New York Central Railroad for six years and for two years with the Lamson Corp. in Syracuse before joining Carrier Corp. in Syracuse in 1956. There he held design and managerial positions in the product design engineering area, retiring in 1984.

He joined ASHRAE in 1960 and was active on several chapter committees. In 1975 he became a member of the chapter Board of Governors, serving in the officer positions until becoming our chapter President for the 1979-1980 year. Joe was an energetic worker for our chapter. I recall that for many years back in the 60's and 70's he was active on the Clambake Games Committee, and would store clambake games equipment in a barn somewhere for the chapter. He had a genial disposition, a ready willingness to work, and always had a good word for everyone.

We extend our sympathy to Vera, his wife of 37 years, and to their children and grandchildren.

Raymond T. Divers, 84, of Camillus, died Tuesday at Community-General Hospital. Born in Franklin, NJ, he grew up in Solvay before moving to Camillus in

1955. He was a managing engineer with Carrier Corp., retiring in 1987 after 37 years. He was the owner of seven patents and was an acknowledged expert in the fields of electric motors and hermetic electric motor insulation. He was a veteran of WW II, having served in the Army Signal Corps. He was a graduate of Solvay High School and attended Syracuse University. He enjoyed gardening, reading, his cats, Rosebud and Goldie and spending time with his family. Surviving are his wife of 59 years, the former Marianne "Anne" Duren; daughters, Pamela Korte and Lorrie

Dee Divers, both of Rochester; brother, C. Kenneth (Dottie) Divers of Baldwinsville; sister-in-law, Margot McVoy of Danville, IL; several nieces and nephews; family friend, Kathy Whiting and former colleague, Wayne Reedy.

# The Fulton Companies Pledge \$2,500.00 towards ASHRAE Research

I would like to thank The Fulton Companies for their pledge of \$2,500.00 towards ASHRAE Research. This is the first time they have donated and it is greatly appreciated. If you or your company hasn't donated yet, you can still donate as much or as little as you want. Every penny counts! Should you choose to donate, contributions should be sent to me and I will forward them onto ASHRAE, or you can donate directly on the ASHRAE website.

Thank you in advance for your support.

Paul Conte Research Promotion Chairman





Raymond Divers



# ProgramSpepeakers

Our meeting this month will again be at the Wyndham Hotel off Carrier Circle. Our speaker will be Scott Reynolds with M/E Engineering.

The presentation will be on Computational Fluid Dynamics. Scott will be speaking about different projects he's done in Central and Western New York. Different topics covered will be Wind Dispersion at a Hospital, IAQ in a Morgue and fire and smoke modeling. The presentation will be worth one Professional Development Hour for Engineers.

Please have your reservations in by Friday

February 7th for this very interesting topic and speaker. Online reservations can be made at http://centralnewyork.ashraechapters.org/ or you can call Paul Conte at 437-0225 (paulc@guckianenergy.com).

Next month's meeting will be the Carrier Sponsored History Night. The topic will be Commissioning History by Ronald J. Wilkinson, P.E. with Dome Tech Commissioning Services out of Edison, N.J.

Hope to see you there!

Jim Walker

	Upcon	ning in 2007-2008	
Feb. 13	Computational Fluid Dynamics	Scott Reynolds, M/E Engineering	Doubletree, Syr.
March 12	Carrier History Night	Ronald J. Wilkinson, Dome Tech	Doubletree, Syr.
		Commissioning, Edison, NJ	
April 9	Tour of Dewitt, Wegmans	Richard Kelly, Wegmans	Wegmans, Fayetteville
May 14	Refrigerants	Mark Spatz, Honeywell	Doubletree, Syr.
June 12	ASHRAE Clambake		Hinerwadels Grove
June 16	ASHRAE Golf Tournament		TBD

# Advertise Here

The CNY Chapter is now accepting business card advertising in this monthly newsletter. Send us your business card (or text for a line card) and we'll scan it in and for \$50 your card will run in the newsletter for the year. Send your ad and payment to:

**ASHRAE Newsletter, Advertising**, P.O. Box 2396, Syracuse, NY 13220 If you have a digital card (or questions), email it to us at westbror@upstate.edu.

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# **Membership Update**

The local CNY ASHRAE chapter would like to recognize three new members: Andrew LaFlair, Zachary Rudy and David Liscum. All three of them join us as students. Andrew and David join us from Lisbon, NY and Heuvelton, NY, respectively, and Zachary joins us from Syracuse. When you see any of our new members please join me in extending them a warm ASHRAE welcome. If you or anyone that you know is interested in joining ASHRAE, please have them sign-up at www.ashrae.org. Or, if they would like to sign-up in person, the local chapter website (http://centralnewyork.ashraechapters.org) is a great place to find out meeting times and locations.

### John Tacklyn ASHRAE Membership Chair

## **ASHRAE Government Affairs Update**

### **ASHRAE Hosts Capitol Hill Briefing**

Consensus-driven, standards have become key to making markets work efficiently, and are essential to both a sound national economy and to the facilitation of global commerce. The U.S. standards system is a demand-driven process in which standards are developed in response to specific concerns and needs expressed by industry, government, and consumers. The U.S. standardization infrastructure reflects a basic national belief that society will benefit and innovation and creativity will flourish in a system that is free from centralized government control but strengthened through essential governmental participation. It is an excellent example of how a strong, dynamic partnership between government and the private sector can help the nation achieve its economic and societal goals. ASHRAE, ANSI and ICC sponsored a Congressional Briefing in the House of Representatives to discuss the role of standards and model codes in the energy efficiency, safety, accessibility and security of our buildings.

The event was moderated by Jim Turner, General Counsel, House Science and Technology Committee. Speakers included U.S. Congressman Dennis Moore (D-Kansas), ANSI President Joe Bhatia, ASHRAE President Kent Peterson, and ICC President Steve Shapiro.

Photos and more information on the briefing is available at http://www.ashrae.org/advocacy/page/1253.

### ASHRAE Provides Technical Guidance on Proposed Depreciation Bill

ASHRAE has provided technical guidance for proposed legislation that would shorten the depreciation of certain HVAC&R systems.

Reps. Melissa Bean (III.) and Pete Hoekstra (Mich.) recently introduced HR4574, which would amend the Internal Revenue Code of 1986 to provide a shorter recovery period for the depreciation of certain systems installed in nonresidential real property or residential rental property.

ASHRAE, at the request of Bean, provided language on the depreciation of HVAC&R equipment. The existing depreciation period is 39 years. The proposed legislation would reduce the period to 20 or 25 years, encouraging replacement of equipment sooner that would result in more modern/efficient equipment being installed.

"ASHRAE contributed language that would encourage building owners to replace older, less-efficient HVAC&R equipment with newer, more efficient systems," Doug Read, ASHRAE's director of government affairs, said. "Owners also would receive additional incentive to go beyond the minimum efficiencies required in ASHRAE/IESNA Standard 90.1. Replacing this equipment will result in significant energy savings, reduced greenhouse gas emissions, and would encourage the retirement of older chillers that require the use of CFCs."

# Energy Efficiency in New Federal Buildings to Increase by 30 percent

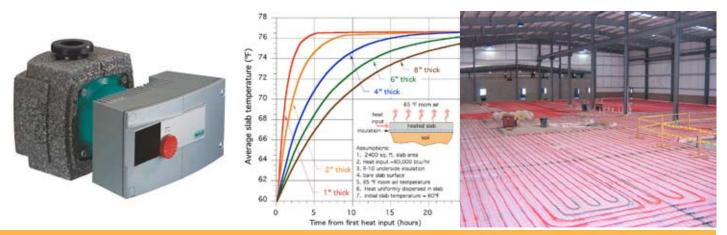
The U.S. Department of Energy has established regulations that require most new federal buildings to achieve at least 30% greater energy efficiency than that of the prevailing building codes. The new standards, which were published in late December, are also 40% more efficient than the standards in the current Code of Federal Regulations and will help federal agencies meet Executive Order #13423, which mandated increased federal energy efficiency. Over the next ten years, the standards could save more than 40 trillion Btu and reduce carbon dioxide emissions by 2 million metric tons. The new regulation updates an interim final rule that DOE issued on December 4, 2006, and which applied to any federal building that entered the "design for construction" phase by January 3, 2007.

The new regulations took effect on January 22 and apply to new federal commercial buildings, multi-family high-rise residential buildings, and low-rise residential buildings. The standards aim to address energy efficiency by looking at a building's entire performance, instead of relying on prescriptive requirements for building components and systems. The high standards put forth in the new regulations will also encourage federal builders to use an integrated approach when constructing new buildings. See the DOE press release http://www.energy.gov/news/5790.htm) and the final rule http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/pdf/E7-24615.pdf

Mohawk Valley Community College 1101 Sherman Drive, Utica, NY 13501

# **Advanced Hydronic Heating Design for Engineers**

April 18, 2008, Utica, NY



### The Seminar:

This seminar is for heating professionals who want to expand their knowledge of hydronic system design using the latest materials and methods available. You'll learn techniques that go well beyond mainstream design practices. Approaches that reduce cost while enhancing performance. Learn about the latest "smart" circulator technology as well as how solar heating can be integrated within traditional hydronic systems. You'll also receive and learn how to use powerful design software (Hydronics System Simulator) that lets you quickly evaluate the "what if" questions associated with routine system design. This software will be demonstrated during the seminar. This seminar also provides 7 professional development hours (PDH) toward NYS Professional Engineers continuing education requirements.

### The Topics

- Application & Piping Of Multiple Modulating Boilers
- Hydraulic Separation Beyond Primary/Secondary Piping
- Distribution Efficiency & the Future of Hydronic Circulators
- Integrating Active Solar Into Hydronic Heating Systems The Latest Approaches
- Homerun distribution systems You'll Never Do Series Systems Again!
- High Capacity Domestic Water Heating
- Residential Applications for Chilled Water Cooling
- Software Assisted System Design Using Hydronics Design Studio

### The Instructor:

John Siegenthaler, P.E., is a mechanical engineering graduate of Rensellaer Polytechnic Institute and a licensed professional engineer. He has 29 years of experience in designing hydronic heating systems. John is an Associate Professor of engineering technology at Mohawk Valley Community College, and author of the text: Modern Hydronic Heating. He is a frequent presenter at national and international conferences on hydronic and radiant heating, and writes about hydronic heating technology for several HVAC trade publications.

### The Details:

When: Friday, April 18, 2008, 8:00 AM-5:00 PM. Manual, lunch, and breaks and design software provided. Where: Mohawk Valley Community College, 1101 Sherman Drive, Utica, NY 13501 Seminar fee: \$299 each if registration and payment is received by March 1, 2008. \$350 each on or after March 1, 2008. 10% discount (off either pre-March 1 or post-March 1, 2008 registration price) for three or more attendees from same firm. Contact: Andrew Dean (315-792-5300, or adean@mvcc.edu)





Thursday, March 27 and Friday, March 28 – early bird registration by March 5<sup>th</sup>!

### Register On the WEB: <u>http://www.esf.edu/outreach/pd/2008/gbc/register.htm</u>

### **Thursday Program Highlights**

### Sustainability in our community: Green and Sustainable Schools

### Pursuing a Vision for Green and Sustainable Schools: A Case Study of an Urban School District's Design Approach

Syracuse School District Program Manager - Featuring lead design professionals from the seven project architect and engineer firms

**Keys to Good School Daylighting -** Michael H. Nicklas, FAIA, Principal, Innovative Design, Inc., Raleigh, North Carolina

Day lighting can be one of the best strategies that you implement in a school. But to achieve the energy and productivity benefits that are possible, your day lighting strategies must be implemented correctly. There is a big difference between view windows and strategies that optimally allow controlled daylight to enter a space in a manner actually deceases cooling demand and does not create glare and contrast problems. This session will discuss the benefits of day lighting but mainly focus on enhancing the attendees' knowledge about practical, cost-effective, state-of-the-art day lighting design practices.

**LEED for Schools** - Diane Brandli, Director of Interior Design, Ashley McGraw Architects P.C.

**Experiential Learning in High Performance, Sustainable Schools -** Michael H. Nicklas, FAIA, Principal, Innovative Design, Inc.

This session will focus on the benefits every school can derive from integrating and utilizing building elements as teaching tools for sustainability. Numerous sustainable design features such as eco-gardens and edible school yards, educational courtyards tied to curriculum themes, interpretive trails, constructed wetlands, day lighting, rainwater catchments, solar domestic hot water, photovoltaic systems, water conservation strategies, recycling systems, and monitoring of sustainable systems will be discussed.

Green Strategies That Cost Less- Michael H. Nicklas, FAIA, Principal, Innovative Design, Inc.

With the experience that comes from being involved in the design of 100 green schools, our firm has learned many important lessons – none more important than the fact that green doesn't always have to cost more. In fact, we have been able to integrate numerous sustainable design strategies while keeping our projects 5% under budget. This presentation will lay out fifty sustainable design strategies that we have implemented in schools that initially cost less to build than conventional, non-sustainable strategies.

**Sustainability Though the K-16 Education System** - President Cornelius B. Murphy, Jr., SUNY-ESF and President Raymond Cross, President, SUNY Morrisville

# Keynote Presentation: <u>A Planet in Peril—The Role of Design in Building Sustainable Cities</u> by Jeremy Harris, Mayor of Honolulu, Hawaii

Mayor Jeremy Harris served for more than ten years as the Mayor of the City and County of Honolulu, Hawaii, the 12th largest city in the United States. He will tell us how he made it happen by using a holistic approach to build the Marine Education Center at the Hanauma Bay Nature Preserve, institute the Waikiki Revitalization project that changed the look of Waikiki's main thoroughfares, and a variety of beach front projects that celebrated the island life, culture and its people.

### Friday Program Highlights

### Panel of Presenters on Community sustainability efforts: Plans and Progress

- Fernando Ortiz, Commissioner of Community Development
- Robert Haley, Urban Design Center of Syracuse (UDC)
- Dean Biancavilla, Urban Design Center of Syracuse (UDC)

SDAT (Sustainability Design Assessment Team) update and progress report from Commissioner Ortiz. Recent Planning and Sustainability including County Settlement Plan by Andres Duany of 2001, the City Comprehensive Plan and components of 2002-6, the SDAT initiative of 2006, and UDC case studies in sustaining neighborhoods and historic resources.

### Panel presentation of the Near West Side Initiative

- Ed Bogucz, Center of Excellence,
- Kerry Quaglia, Home Headquarters,
- Marilyn Higgins, Syracuse University,
- Mark Robbins, Syracuse University
- Community representative

The Near West Side Initiative - What is it? Panel members will discuss projects underway to develop and revitalize a community neighborhood of 200 acres located between Fayette Street, Geddes Street and West Street in Syracuse, NY.

LEED for Neighborhood Development by Kevin Stack and Josh Stack, Northeast Natural Home

# **Bold Landscaping—Dramatic Impact and Reduced Maintenance by Terry L. Ettinger, Principal Horticulture Consulting Services**

Using the Oncenter convention complex landscape installation as a case study, this presentation will illustrate how replacing 15,000 square feet of turf with nearly 10,000 shrubs, perennials, ornamental grasses, and spring-flowering bulbs has reduced maintenance costs while creating a visually stunning landscape that relates to the seasons and provides plant materials for other county facilities.

# How the Architects can Stop Global Warming- (Architecture 2030)- David Ashley, LEED AP and Peter Larson of Ashley McGraw Architect, P.C.

Mr. Ashley has given lectures and seminars on green building principles, including the E-4 Conferences for EBA and NYSERDA, NYSERDA Green School presentations, lectures at SUNY ESF, AIA, CSI, ASID, subcontractors' associations and Society of Military Engineers. He regularly conducts classes on becoming a LEED Accredited Professional. Peter E. Larson, AIA, LEED AP is the leader of Ashley McGraw Architects' Advanced Building Studio.

### Sustainability Academy: Ken Bobis, Architecture & Interior Design, O.C.C., Mark Naef, Greg Michel

Come find out what the Sustainability Academy is all about. The Sustainability Academy is a series of educational seminars to be delivered to interested Syracuse home owners in an effort to increase sustainability within our own community. The 6 week series will provide groups of experts in sustainability practices in focused sessions that can be used in our own households and neighborhoods.

### **Conference Sponsors:**

Platinum Level - Robson Woese, Pella, Bovis Lend Lease, Center of Excellence, Gold Level - NY Concrete Promotion Council, Sentry Lighting, Silver Level - Ashley McGraw Architects, LeChase Construction, Bronze Level - ASHRAE with support from the Upstate Chapter of the US Green Building Council, Greening USA and the Oncenter.